# Defense Advanced Research Projects Agency (DARPA) Information Resources Directorate (IRD)

# Attachment No. 2

Service Level Objectives (SLO's)\*

# \*NOTE: For the purposes of these Service Level Objectives (SLOs), the following will be considered Standard Exceptions:

- 1) COR Waiver.
- 2) COR-approved, Scheduled maintenance (Note: Does not include Emergency Maintenance.)
- 3) Any networks or network equipment not owned or controlled by the Contractor.
- **4)** Circumstances beyond reasonable control, including, without limitation, acts of war, insurrection, sabotage, armed conflict, embargo, fire, flood, or power outages needed for the provision of SLO.
- **5)** Any negligence, willful misconduct, or use of Services in breach of Acceptable Use Policy by users.

**Service Name**: Network and Internet Services

**SLO 1.1** 

**Service Description**: Vendor provided services to interconnect DARPA file servers, workstations, and peripherals; services include security, interoperability, network management and Internet connectivity.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 1:** Availability

Baseline Value: 0.9999

**Performance Description:** Availability of internal and external Network services to the SDP connection point. Availability includes 24 x 7 x 365 uptime of all devices and components (e.g., DHCP, router) required for Network and Internet services.

**Performance Category Exceptions:** Outages that do not affect the customer's service availability will not be included where there are redundant capabilities.

**How Measured:** Network Monitoring Applications (SiteScope, HP OpenView, etc.) will be used to identify and record any unapproved outages with the identified Network Services. Network availability will be measured independently; failure of either measure is a failure to comply with the SLO.

**Baseline Value Formula:** 

#### # Hours Service is Available # Hours in Month

#### **Additional Requirements**

**Presentation Methods:** Continuous monitoring using a web-based dashboard tool in real time, with drilldown capability to actual monitoring tool being used. Automated NMS should have capability to display at least 13 months of historical data.

**Reports:** Monthly and quarterly summary report (availability); Incident reports; Monthly trending reports (covering 13 months), Immediate Notification/Escalation required

**Service Name**: Network and Internet Services

**SLO 1.2** 

**Service Description**: Vendor provided services to interconnect DARPA file servers, workstations, and peripherals; services include security, interoperability, network management and Internet connectivity.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 2**: Capacity

**Baseline Value:** < 0.70

**Performance Description:** Peak utilization of bandwidth during the reporting month. Utilization exceeding the baseline value at any point during the month constitutes failure to comply with the SLO.

**Performance Category Exceptions:** None

**How Measured:** The network segments, MAN/WAN, core switches and external networks must maintain at least 30% headroom. The Baseline Value Formula will be calculated for the following, as applicable:

- Core Switches
- Wide Area Network (WAN)/Metropolitan Area Network (MAN)
- External networks
- Network Segments (average)

Failure of any measure is a failure to comply with the SLO.

**Baseline Value Formula:** 

Peak Bandwidth Utilization
Total Bandwidth

#### **Additional Requirements**

**Presentation Methods:** Web-based dashboard tool in real time, with drilldown capability to actual monitoring tool being used. Automated network monitoring tool should have capability to display at least 13 months of historical data.

**Reports:** Monthly and quarterly summary report (availability); Incident reports; Monthly trending reports (covering 13 months), Immediate Notification/Escalation required

# **Service Name:** *E-mail, Calendaring, and Shared File Services*

**SLO 2.1** 

Service Description: Vendor provided services for sending, receiving, storing, and processing e-mail and attachments, services providing calendaring capabilities, and services allowing users to store and retrieve files on shared, controlled access storage media.

**Service Wide Exceptions:** Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

# **Performance Category 1:** Availability (to SDP)

Baseline Value: 0.9999

**Performance Description:** Availability is defined as the portion of time that services are accessible to end users (24 x 7 x 365).

Performance Category Exceptions: Where there are redundant capabilities, outages that do not affect the customer's service availability will not be included.

**How Measured:** Monitoring tools to measure uptime and availability of services. "Hours Unavailable" includes unapproved service-affecting outages.

The calculation is performed as applicable:

- E-mail
- Calendaring
- Shared File Services

Failure of any measure is a failure to comply with the SLO.

#### **Baseline Value Formula:**

# Hours in Month - # Hours Unavailable # Hours in Month

#### **Additional Requirements**

**Presentation Methods:** Web-based dashboard tool in real time, with drilldown capability to actual monitoring tool being used.

**Reports:** Monthly and quarterly summary report (availability); Incident reports (within 24 hours); Monthly trending reports (covering 13 months)

Service Name: Government and Legacy Applications & SLO 3.1

Databases

**Service Description:** Vendor performance in support of OLAs between the Vendor and Government application and database owners. OLAs fall into three general categories:

- a. Vendor managed and maintained applications, databases and systems
- b. Connectivity and access to offsite Government applications or databases
- c. Server administration and maintenance of third-party managed applications, databases and systems.

Service Wide Exceptions: Standard Exceptions

Applicable Service Delivery Point(s): Not applicable

Performance Category 1: OLA Compliance

Baseline Value: Pass

**Performance Description:** The Vendor's ability to develop, maintain, and perform against Organization Level Agreements (OLAs).

Performance Category Exceptions: None

**How Measured:** Satisfaction of the Application and Database Owner. Failure to satisfy any one Application Owner is a failure to comply with the SLO.

Baseline Value Formula: Pass/Fail

#### **Additional Requirements**

**Presentation Methods:** Satisfaction of the Application Database Owner is measured during monthly meetings.

**Reports:** Monthly and quarterly summary report, Incident report generated to the Application and Database Owner and the Government w/in 24 hours of Incident, Immediate Notification/Escalation required. The Vendor shall provide monthly reports showing downtime, degradation of service and user feedback statistics.

Service Name: Data Management

**SLO 4.1** 

**Service Description:** Vendor provided services for data backup, retention, and restores.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 1:** Timeliness (for restores)

**Baseline Value:**  $\leq 2$  hours from backup/ $\leq 1$  Working Day from

archive.

**Performance Description:** This SLO includes all vendor-performed restores. Measured from time of request to the successful restoration of files with customer notification (email or voicemail).

**Performance Category Exceptions:** Data deleted by an end user prior to the data being backed up is considered non-retrievable for reporting purposes.

**How Measured:** Average of restore times as determined by Help Desk tickets, and/or backup software/logs. Failure of any measure is a failure to comply with the SLO.

**Baseline Value Formula:** 

Total Time for Backup Restores
# of Backup Restores

Total Time for Archive Restores
# of Archive Restores

# **Additional Requirements**

**Presentation Methods:** Help Desk ticket reports.

**Reports:** Monthly and quarterly summary reports.

Service Name: Data Management

**SLO 4.2** 

**Service Description:** Vendor provided services for data backup, retention, and restores.

**Service Wide Exceptions:** Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

Performance Category 2: Accuracy (backup and restore

success)

**Baseline Value:** 0.9999

**Performance Description:** Accuracy will be measured by successful backups and restores. A backup is considered successful based on logs and successful restores. A restore is considered successful when the user can access the data. This SLO includes all vendor-performed backups and restores.

**Performance Category Exceptions:** A data recovery request by a DARPA end user must be qualified as recoverable via backup or archive media. Data deleted by an end user prior to the data being backed up is considered non-retrievable for reporting purposes.

**How Measured:** Percentage of successful backups and restores as determined by Help Desk tickets, and/or backup software/logs. Failure of any measure is a failure to comply with the SLO.

**Baseline Value Formula:** 

# of Successful Backups # of Backups Attempted

# of Successful Restores # of Restores Attempted

#### **Additional Requirements**

**Presentation Methods:** Help Desk ticket reports and backup logs.

**Reports:** Monthly and quarterly summary reports, failure notifications.

**Service Name:** Remote Connectivity Services(NO REMOTE FOR CLASSIFIED SYSTEMS)

**SLO 5.1** 

**Service Description:** Vendor provided services to allow end users to access the unclassified DARPA network from remote locations (e.g., through Virtual Private Networking (VPN) or dial-up).

**Service Wide Exceptions:** Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 1:** Availability

**Baseline Value:** 0.9995

**Performance Description:** Availability of DARPA unclassified network from remote locations. Measured at the devices which provide remote connectivity.

**Performance Category Exceptions:** Where there are redundant capabilities, outages that do not affect the customer's service availability will not be included. Excludes any outages caused by Government furnished TELCO lines.

How Measured: Monitoring tools, Help Desk tickets.

**Baseline Value Formula:** 

# Hours Available # Hours in Month

# **Additional Requirements**

**Presentation Methods:** Web-based dashboard tool in real time, with drilldown capability to actual monitoring tool being used.

**Reports:** Monthly and quarterly summary report, Immediate Notification/Escalation required for failures.

**Service Name:** Remote Connectivity Services(NO REMOTE FOR CLASSIFIED SYSTEMS)

**SLO 5.2** 

**Service Description:** Vendor provided services to allow end users to access the unclassified DARPA network from remote locations (e.g., through Virtual Private Networking (VPN) or dial-up).

**Service Wide Exceptions:** Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 2**: Capacity

**Baseline Value:** < 0.70

**Performance Description:** Peak utilization of remote connectivity services during the reporting month. Utilization exceeding the baseline value at any point during the month constitutes failure to comply with the SLO. Does not exclude surge periods (such as DARPA Tech) which may require greater than normal capacity.

**Performance Category Exceptions:** None

**How Measured:** Network monitoring tool statistics. Failure of any measure is a failure to comply with the SLO. The calculation is performed as applicable:

- o VPN
- o Dial-up

Failure of any measure is a failure to comply with the SLO.

**Baseline Value Formula:** 

Peak Bandwidth Utilization
Total Bandwidth

# **Additional Requirements**

**Presentation Methods:** Web-based dashboard tool in real time, with drilldown capability to actual monitoring tool being used. Automated monitoring tool should have capability to display at least 13 months of historical data.

**Reports:** Monthly and quarterly summary report; Monthly trending reports (covering 13 months).

# **Service Name:** Program Management Services

**SLO 6.1** 

**Service Description:** Vendor provided services for responsive and effective service delivery; program, project, and financial management; and contract administration.

**Service Wide Exceptions:** Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

Performance Category 1: Availability and Responsiveness Baseline Value: Pass

**Performance Description:** The contractor personnel (Program Manager or designate) shall be available and accessible, in person or by phone, for consultation with DARPA personnel as identified by IRD. The expectation is within 5 minutes during business hours and within one hour after business hours. This SLO will also include completing contractual tasks as directed by IRD Management.

Performance Category Exceptions: None

How Measured: Government satisfaction

Baseline Value Formula: Pass/Fail/Excel

# **Additional Requirements**

**Presentation Methods:** n/a

**Reports:** n/a

**Service Name:** Program Management Services

**SLO 6.2** 

**Service Description:** Vendor provided services for responsive and effective service delivery; program, project, and financial management; and contract administration.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 2:** Flexibility and Innovation

**Performance Description:** This includes proactively identifying problems, proposing problem resolutions to IRD Management, introducing or adjusting processes, technology, and subject matter

**Baseline Value:** Pass

expertise to respond to evolving requirements within the dynamic DARPA environment.

**Performance Category Exceptions:** None

How Measured: Government Satisfaction

Baseline Value Formula: Pass/Fail/Excel

# **Additional Requirements**

Presentation Methods: n/a

Reports: n/a

**Service Name:** Program Management Services

**SLO 6.3** 

**Service Description:** Vendor provided services for responsive and effective service delivery; program, project, and financial management; and contract administration.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

Performance Category 3: Reporting Timeliness and Accuracy Baseline Value: 1.00

**Performance Description:** Vendor shall provide accurate reports and information feeds, in the designated format, according to the specified schedule.

**Performance Category Exceptions:** None

How Measured: Validation of vendor report data and delivery

**Baseline Value Formula:** 

# Reports delivered on schedule and accurately

Total # reports specified

# **Additional Requirements**

**Presentation Methods:** As specified

**Reports:** See PWS/SOW/CDRL for report schedules and formats

Service Name: Security Software Distribution

**SLO 7.1** 

**Service Description:** Vendor provided services to distribute security patches and updates to all DARPA-utilized devices.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 1:** *Timeliness* 

**Baseline Value:** 100%

**Performance Description:** Time required to implement real time system fixes/patches to address security vulnerabilities. (Note: Implementation of Information Assurance Vulnerability Alerts (IAVAs) shall be in accordance with required timeframes). Critical server and workstation patches should begin within 1 hour of release.

**Performance Category Exceptions:** None

**How Measured:** Patch monitoring tool, and raw data. CRITICAL: Servers and Local Area Network-attached Workstations: finished within one (1) day. NON-CRITICAL: Unless otherwise specified, finished with all network-attached devices no later than 30 days after release. The calculation is performed as applicable:

- o Critical server patches
- Critical workstation patches
- Non-critical patches

Failure of any measure is a failure to comply with the SLO.

**Baseline Value Formula:** 

# unpatched devices
Total # of devices

# **Additional Requirements**

**Presentation Methods: Report** 

**Reports:** Monthly and quarterly summary report, Near real time report

Service Name: Help Desk Services

**SLO 8.1** 

**Service Description:** Vendor provided services to resolve tickets to the end-user's satisfaction.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 1:** Ticket Resolution

**Baseline Value:** 4 hours

Performance Description: Time to complete from initial notification to help desk or automated

monitoring tool.

Performance Category Exceptions: None

**How Measured:** Help Desk tickets, automated monitoring tools. Applicable tickets will be calculated using the interior mean, which will exclude the 1 percent of tickets with the longest resolution time, and the 1 percent of tickets with the shortest resolution time.

Scoring for ticket calculation:

100% - less than 1 hr 90% - less than 2 hrs

70% - less than or equal to 4 hrs

0% - more than 4 hrs

#### **Baseline Value Formula:**

<u>Total Resolve Time for Help Desk Tickets</u> # of Applicable Help Desk Tickets

# **Additional Requirements**

Presentation Methods: Raw ticket data

Reports: Monthly and quarterly summary report, trend analysis

Service Name: Help Desk Services

**SLO 8.2** 

**Service Description:** Vendor provided services to resolve tickets to the end-user's satisfaction.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 2:** Password and Account Resets

**Baseline Value:** < 10 minutes

Performance Description: Time to complete password resets and unlock an account from initial

notification to help desk.

Performance Category Exceptions: None

**How Measured:** Help Desk tickets

**Baseline Value Formula:** 

<u>Total Resolve Time for Applicable Tickets</u>

# of Applicable Tickets

# **Additional Requirements**

**Presentation Methods:** Raw ticket data

**Reports:** Monthly and quarterly summary report

Service Name: Help Desk Services

**SLO 8.3** 

**Service Description:** Vendor provided services to resolve tickets to the end-user's satisfaction.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 3:** Accuracy

**Baseline Value:** >0.99

**Performance Description:** This measures the accuracy of resolved problems/issues by the Help Desk.

An inaccurate resolution is one for which a ticket is reopened.

Performance Category Exceptions: None

How Measured: Help Desk tickets, Problem Management system

**Baseline Value Formula:** 

1 - # tickets reopened # tickets

# **Additional Requirements**

Presentation Methods: Raw ticket data

Reports: Monthly and quarterly summary report, trend analysis

Service Name: Moves, Adds, Changes and Deletes
(MACDs)

SLO 9.1

**Service Description:** Vendor provided service to execute moves, adds, changes, and deletes of hardware and software. This service also includes delivery of resources procured through the catalog.

**Service Wide Exceptions:** Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

Performance Category 1: Responsiveness	<b>Baseline Value:</b> $\leq 2$ Working Days for
	Seat items, $\leq 5$ Working Days for Catalog
	items

**Performance Description:** Time to complete from initial notification to help desk.

**Performance Category Exceptions:** Excludes network administrative MACDs, which would include permissions, account creation and administration, which are covered under the Help Desk Ticket Resolution SLO.

**How Measured:** Help Desk tickets, automated monitoring tools. The measurement begins at the time a ticket is opened by the help desk and ends when the service is completed.

The calculation is performed as applicable:

- Seat Items
- o Catalog Items

Failure of any measure is a failure to comply with the SLO.

#### **Baseline Value Formula:**

Total Resolve Time for MACD Tickets
# of Applicable MACD Tickets

# **Additional Requirements**

Presentation Methods: Catalog and ticket raw data

**Reports:** Monthly and quarterly summary report, trend analysis

#### Service Name: Configuration and Asset Management

**SLO 10.1** 

**Service Description:** Vendor provided services to control, track and document assets, configuration changes, and relationships, including hardware, software, documentation, processes and coordination with DAA and CCB.

**Service Wide Exceptions:** Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 1:** Accuracy

**Baseline Value:** 1.0

**Performance Description:** Measure will be accuracy of inventory in the configuration management database. Provide update of Configuration Management Plan and topology in coordination with certification and accreditation efforts.

Performance Category Exceptions: None.

**How Measured:** Reporting to a CM/Asset database and audits.

**Baseline Value Formula:** 

# Accurate Assets
# Assets

# **Additional Requirements**

**Presentation Methods:** Verification through monthly reports.

**Reports:** Monthly and on-demand credit asset report; Quarterly audit report, Configuration Management Plan and Topology.

Service Name: Security Briefing

**SLO 11.1** 

**Service Description:** Vendor provided briefing describing the following for the period: incident trending and analysis, enhancements made, including changes, and upgrades, summary of the security posture and recommendations for improvements.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 1:** Security Briefing

**Baseline Value:** Pass

**Performance Description:** Measure will be accuracy and thoroughness of reporting, detail of analysis, and relevant and realistic recommendations.

**Performance Category Exceptions:** 

How Measured: Government Satisfaction

Baseline Value Formula: Pass/Fail/Excel

# **Additional Requirements**

**Presentation Methods:** Oral Briefing with read-aheads.

**Reports:** Monthly

Service Name: Procedural Compliance

**SLO 12.1** 

Service Description: Vendor compliance with defined Standard Operating Procedures (SOPs).

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 1:** Compliance

**Baseline Value:** Pass

Performance Description: Measure will be compliance with defined SOPs.

**Performance Category Exceptions:** 

How Measured: Audit and/or exception.

**Baseline Value Formula:** Pass/Fail

# **Additional Requirements**

**Presentation Methods:** n/a

**Reports:** Monthly.

Service Name: Incident Response SLO 13.1

**Service Description:** Vendor provided services to respond to security incidents.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

Performance Category 1: Timeliness Baseline Value: Pass

**Performance Description:** Measure will be timeliness (as defined in the escalation procedures) of incident identification, Government notification, and time to begin mitigation (e.g., containment, remediation planning).

**Performance Category Exceptions:** 

**How Measured:** Government data and Help Desk Tickets

Baseline Value Formula: Pass/Fail

# **Additional Requirements**

**Presentation Methods:** Incident reports and notifications.

Reports: Per incident.

Service Name: Incident Response SLO 13.2

**Service Description:** Vendor provided services to respond to security incidents.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

Performance Category 2: Effectiveness Baseline Value: Pass

Performance Description: Measure will be effectiveness of incident response, which may include

containment, remediation and/or resolution of anomalies.

**Performance Category Exceptions:** 

How Measured: Government satisfaction.

Baseline Value Formula: Pass/Fail/Excel

# **Additional Requirements**

**Presentation Methods:** Incident reports and notifications.

Reports: Per incident.

Service Name: Security Reporting

**SLO 14.1** 

**Service Description:** Vendor provided services to generate and convey raw Computer Network Defense (CND) data (e.g., firewall logs, system event logs, router logs), summarize and report the data in a meaningful format with drill-down capability. Vendor will work in support of DAA/ISSO requirements.

**Service Wide Exceptions:** Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

**Performance Category 1:** Timeliness and Accuracy

**Baseline Value:** Pass

**Performance Description:** Measure will be the timely and accurate delivery of raw data and reports, and availability of dashboards and/or security consoles in coordination with DAA/ISSO.

**Performance Category Exceptions:** 

How Measured: Government satisfaction.

Baseline Value Formula: Pass/Fail

#### **Additional Requirements**

**Presentation Methods:** Data files, syslog entries, and/or Web-based reporting.

**Reports:** Continuous, real time or near real time, as appropriate.

Service Name: Certification & Accreditation

**SLO 14.2** 

**Service Description:** Vendor provided services to generate appropriate certification and accreditation documentation to support national accreditation decision through the DITSCAP process and DARPA DAA.

Service Wide Exceptions: Standard Exceptions

**Applicable Service Delivery Point(s): TBD** 

Performance Category 1: Timeliness and Accuracy Baseline Value: Pass

**Performance Description:** Measure will be the timely and accurate delivery of Security CONOPS, System Security Plan, Risk Management Matrix, Security Requirements Traceability Matrix, Certification Test Plan and Penetration Testing to the ISSO. Findings of certification testing will be categorized and must be addressed to the satisfaction of ISSO and DAA. Ensure that Configuration Management Plan and quarterly topology updates are included in the SSAA.

**Performance Category Exceptions:** 

How Measured: Government satisfaction.

Baseline Value Formula: Pass/Fail

# **Additional Requirements**

**Presentation Methods:** Data files, syslog entries, and/or Web-based reporting.

**Reports:** Continuous updates, real time or near real time, as appropriate.